

TRANSCRITICAL (CO₂) FITTINGS

TECHNICAL DATASHEET



Technical Specifications:

- Material: Copper-Iron alloy (CuFe2P)
- Compatibility: R-744 (CO₂), including transcritical and subcritical applications
- Pressure Rating: Suitable for pressures rated to 130 bar (1885 psi)
- Manufacturing Standards: S/NZS 1200, AS 4041 and AS/NZS 5149
- Connection Types: Brazing fittings (flare and compression are not suitable)

Applications:

- Supermarket refrigeration (CO₂ transcritical booster systems)
- Cold chain logistics and storage facilities
- Industrial refrigeration (meat processing, dairy, and breweries)
- Heat pump and water heating systems using R-744

Installation Guidelines:

- Use high-temperature silver brazing alloys (minimum 15% silver) for strong joints
- Purge with nitrogen during brazing to prevent oxidation and ensure a clean joint
- Verify system design pressures to ensure compatibility with transcritical operation

SIZE RANGE	From 3/8" up to 2-1/8"
DN SIZE RANGE	DN10 up to DN54
MATERIAL	Copper alloy CuFe2P
OPERATING TEMPERATURE	-196° C to 150° C
MAXIMUM OPERATING PRESSURE	130 bar / 13 MPa / 1885 psi at 150° C
TUBE COMPATIBILITY	Suitable for most commercially available copper-iron alloy pipe types